Contents of Volume 15

Volume 15 Number 1 January–February 1993

Special Issue

International Symposium on Laboratory Automation and Robotics 1993. Management Papers

Introduction
P. B. Stockwell 1

Practical aspects of laboratory automation in pharmaceutical development
E. J. McGonigle 3

Rational drug design, medicinal chemistry, planned serendipity and the impact of automation on the drug discovery process
S. O'Connor 9

Laboratory automation: changing the role of the technical professional
K. H. Halloran 13

Managing the design and implementation of an agrochemical central sample preparation laboratory
A. N. Mannherz 19

Superior productivity—in the laboratory and beyond
F. H. Zenie 23

Volume 15 Number 2 March–April 1993

Obituary 35

Computerized data treatment for an HPLC-GFAAS system for the identification and quantification of trace element compounds
G. Kölbl, K. Kalcher and K. J. Irgolic 37

Analytical performance of the selective multianalyser Olympus AU 5200
H. Mayer, C. Luley, M. Behnke and H. Wieland 47

An automated method for the determination of deoxyribonuclease activity as exemplified by fractionation of the components of the medicament Varidase®
I. C. Locke, M. P. Ramsey, S. S. Hill and B. G. Carpenter 65

Technical note: Identification system for production line tracking of pharmaceuticals 71

New Products 73

Volume 15 Number 3 May–June 1993

The role of atomic fluorescence spectrometry in the automatic environmental monitoring of trace element analysis
P. B. Stockwell and W. T. Corns 79

Abstracts of papers presented at the 1993 Pittsburgh Conference 85

Volume 15 Number 4 July–August 1993

Automatic simultaneous determination of copper and lead in biological samples by flow injection/stripping voltammetric analysis
A. Izquierdo, M. D. Luque de Castro and M. Valcárcel 121

Evaluation of the IL-Phoenix chemistry electrolyte analyser
F. Masià, A. Alumà, C. Biosca, M. T. Casamajó, F. Antoja and R. Galimany 127

An automated GC/MS system for the analysis of volatile and semi-volatile organic compounds in water
A. K. Vickers and L. M. Wright 133

Flow injection analysis of water. Part 1: Automatic preconcentration determination of sulphate, ammonia and iron(II)/iron(III)
J. S. Cosano, M. D. Luque de Castro and M. Valcárcel 141

Flow injection analysis of water. Part 2: Integrated system for automatic multideterminations
J. S. Cosano, M. D. Luque de Castro and M. Valcárcel 147

New Products 151

Volume 15 Number 5 September–October 1993

A portable battery-powered flow injection monitor for the *in situ* analysis of nitrate in natural waters
N. J. Blundell, A. Hopkins, P. J. Worsfold and H. Casey 159

Criteria for the assessment of analyser practicability
C. Biosca and R. Galimany 167

Fully-automated system for dissolution rate of solid oral dosage forms according to the paddle method
E. Lamparter and D. Riedl 171

Fluorimetric methods for the measurement of intermediate metabolites (lactate, pyruvate, alanine, β-hydroxybutyrate, glycerol) using a COBAS FARA centrifugal analyser
L. D. Monti, P. E. Sandoli, S. Costa, V. C. Phan and P. M. Piatti 177

Development of an intelligent motion controller and its application to the automation of a McBain-Bakr balance
J. Malczyk, O. Talu and R. Megargle 183

Volume 15 Number 6 November–December 1993

Multicentre evaluation of the Boehringer Mannheim/Hitachi 911 Analysis System
Z. Zaman, N. Blanckaert, Ch. Cobbaert, P. Gillery, P. Hagemann, H. Luthe, R. Motta, D. Patrono, M.-A. Jionsué, A. Torralba, M. J. Castiñeiras, X. Fuentes-Arderiu, W. Bablok, I. Domke and W. Stockmann 189

A PC-based titrator for flow gradient titrations
B. Fuhrmann and U. Spohn 209

Systematic top-down approach to clinical chemistry
H. L. Pardue, A. Truchard, K. Ozawa, J. Place and P. Schnipelsky 217

Signal-to-noise optimization and evaluation of a home-made visible diode-array spectrophotometer
I. M. Raimundo, Jr. and C. Pasquini 227

Index of Authors 233